



**Roller bearing for melting furnaces, etc. - is made of sintered silicon nitride with oxide additives of magnesium, zirconium, strontium, aluminium and rare earth metals**

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**Abstract of DE4235838**

Roller bearing has outer ring, inner ring or roller bearing element made of a sintered SiN material containing in wt.% 0.5-4 MgO; 0.3-3 ZrO<sub>2</sub> and 1.5-5 (in combination with MgO and ZrO) of at least one chosen from SrO, Al<sub>2</sub>O<sub>3</sub> and rare earth metal oxide. The sintered SiN pref. contains 0.1-3wt.% Al<sub>2</sub>O<sub>3</sub>, and/or 0.1-2 SrO and 0.5-3 CeO<sub>2</sub>. The average particle size of the oxides in the material is micron max. USE/ADVANTAGE - In roller bearings for melting furnaces, hot dip galvanizing baths and electroplating baths, drive shaft of tool machines and turbomolecular pumps. Roller bearing is reliable and has long work life with high good corrosion resistance.

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